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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/907,260	07/17/2001	Paul D. Keppel	106E-0023CIP	7018

7590 11/20/2003

MILLER, EVERMAN, & BERNARD, PLLC
4701 Hedgemore Drive
Suite 250
Charlotte, NC 28209

EXAMINER

MAYO III, WILLIAM H

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/907,260

Applicant(s)

KEPPEL, PAUL D.

Examiner

William H. Mayo III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-8 is/are allowed.
- 6) ☒ Claim(s) 1-3, 9 and 10 is/are rejected.
- 7) ☒ Claim(s) 4 and 11-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 17, 2003 has been entered.

Drawings

2. The drawings were received on October 17, 2003. These drawings are approved.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Divljakovic et al (Pat Num 6,087,836, herein referred to as Divljakovic). Divljakovic discloses an electrical conductor (Fig 5) for usage with coil wound device (Col 1, lines 5-9). Specifically, with respect to claim 1, Divljakovic discloses an electrical conductor (30') comprising a wire (34') abutting itself in a first curvilinear row (i.e. helically) that may be a bare wire (Col 3, lines 53-62, as shown in Fig 3) and coiled equal-distantly about a curvilinear centerline forming a curvilinear helix (Fig 5) and an conductor (32'), which may be insulated with insulation (Col 3, lines 53-62, as shown in Fig 3) and positioned along the curvilinear centerline and disposed within the bare wires (34', Fig 5). With respect to claim 3, Divljakovic discloses that the bare wire (32') makes up the conductor layer (20), which is grounded (see Fig 6). With respect to claim 9, Gray discloses a wire assembly (30') comprising a first conductor (32'), a bare second conductor (34') abutting itself and forming a first helix conductor layer (i.e. helically, Fig 5) around the first conductor (32'), which may be insulated with insulation (Col 3, lines 53-62, as shown in Fig 3) and positioned along the curvilinear centerline and disposed within the bare wires (34', Fig 5).

However, Divljakovic doesn't necessarily disclose the bare conductor is a plurality of conductors (claims 1 & 9), nor the plurality of bare conductors being three or more conductors (claims 2 & 10).

Gray teaches an electrical conductor (Figs 1-5) wherein the conductive layer is formed of a configuration well known in the art of cables (Col 1, lines 6-11). Specifically, with respect to claims 1-2 & 9-10, Gray teaches an electrical conductor (10) comprising a conductor layer (20) formed of a plurality of bare wires (28) in a first curvilinear row (i.e. helically) and coiled equal-distantly about a curvilinear centerline forming a curvilinear helix (Col 3, lines 29-32) and an conductor (16), which is insulated with insulation (18), is positioned along the curvilinear centerline and disposed within the bare wires (28, Fig 1), wherein the plurality of bare wires (28) comprises three or more bare wires (i.e. four, Fig 2).

With respect to claims 1-2 and 9-10, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the conductor layer of Divljakovic to comprise a plurality of bare wires configuration as taught by Gray since it is well known in the art that conductor layers are commonly made of a plurality of conductor wires having different configurations such as braided or helically wrapped as taught by Gray and since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. (*St. Regis Paper Co v. Bemis Co.*, 193 USPQ 8).

Allowable Subject Matter

6. Claims 5-8 are allowed.
7. Claims 4 and 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. Claim 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
9. The following is a statement of reasons for the indication of allowable subject matter: This invention deals with an electrical conductor that is capable of applying at least eighty percent of voltage supplied to the conductor (claim 4). This invention also deals with an electrical conductor that further comprises a plurality of insulated wires juxtaposed in a second curvilinear row and coiled around the bare wires forming a curvilinear generally rectangular chamber around the bare wires (claim 5). This invention also deals with a wire assembly that further comprises a plurality of third conductors being coiled around the plurality of second conductors (claim 11). The above stated claim limitations, in combination with other claim limitations, is not taught or suggested by the prior art of record. Claims 6-8 are depended upon allowed claim 5 and therefore are allowed.


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Communication

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (703) 306-9061. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308-3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


WHM III
November 14, 2003